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THE - GRAPHIC DRAWING - BOOKS

BOOK - EIGHT



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THE - PRANG - COMPANY

NEW YORK - CHICAGO - BOSTON - ATLANTA - DALLAS

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General Plan

In Book Eight a greater emphasis is placed upon technical excellence. The pupils are now old enough to be held to definite standards of work, and though the classification of subjects is the same as in the lower books of this series, the mediums and methods employed have undergone a gradual but complete change. In this way the pupil is kept interested. He studies nature, for instance, with a direct view of using nature forms in design, and as a means for developing power in the technique of the pencil. The results of his work become interesting in themselves, and are something more than mere records of his observation or development. As with former books, the teacher should feel free to make any adjustment of the lessons that will make them fit local conditions. The division of subjects is as follows: Nature, Object Drawing and Perspective, Design, Figure and Animal, Construction, Lettering, Picture Study and Theory of Color.

Nature

Pages 3, 7 and 9. Any large, simple flower, with leaves, buds and seedpods of interesting shape may be selected for work similar to that given on page 3. Each pupil should provide himself with a specimen. He can then control the position that he wishes to draw. A well arranged drawing on 9" x 12" white paper should be required from the pupils, showing the complete growth, and some of the details.

In sketching from vegetables, provide specimens enough so that all pupils may obtain a good view. One specimen will usually answer for six pupils. Pencil drawings should not be made in a size much larger than the sketches on page 7, as the difficulty of covering large spaces of paper with pencil technique is great. Page 9 shows a group of pencil sketches that may be profitably copied by pupils in eighth grade. After a copy has been made, the pupil should sketch from an actual tree or house in order to apply what he has learned. It is only as practice in rendering that copying of another's work should be permitted.

Object Drawing and Perspective

Pages 11, 13, 15, 17. Three ways of finishing an accurately sketched piece of still life are shown on page 11. Eighth grade pupils will enjoy this variety in the treatment of a single object. The text explains the processes. Details of cover, spouts, handles, etc., should be studied from the objects themselves. The sketches on page 13 only suggest that many different features of this kind are encountered in the study of objects. The drawing of books (page 15) will tax the pupil's ability to draw in correct perspective, and also his power in pencil rendering. Much practice may be devoted to this kind of work, with profit. Each pupil should construct again the hollow cube given as an exercise in Book Six, page 28. Cutting away two adjacent sides of the box will present the leading lines of a room interior. When the perspective principles involved are thus plainly shown, the difficulty of sketching room interiors will be lessened. Pupils should sketch corners of the schoolroom, in outline.

Design

Pages 5, 20, 39. Page 5 shows four units taken from details of growth found in the hibiscus, shown on page 3. The pupils should work from a different flower, but should carry out the space divisions suggested in the problem on page 5. If this exercise is carefully done, the result will be beautiful. The color scheme used should be developed from the Chart on page 2. The color plate on page 20 is fully explained on page 19. Page 39 is also explained on page 40.

(Continued on Page 3, of cover.)

THE GRAPHIC DRAWING BOOKS

A SERIES OF GRADED DRAWING BOOKS
PRESENTING GRAPHICALLY, BY MEANS
OF PROGRESSIVE STEPS, A COURSE IN COLOR,
DRAWING, DESIGN, CONSTRUCTION AND
PICTURE STUDY



THE PRANG COMPANY

SUGGESTIONS FOR PROTECTING YOUR COLOR CHART

The Outline Color Charts in this series of Drawing Books are intended to be painted by hand by the pupils. It is not enough for children to look at and admire a Color Chart made by some one else. In order to receive the most benefit educationally they must actually produce the Chart themselves. These are the only Drawing Books yet published that present an organized and graded series of Color Charts for the children to execute. By making use of the following directions the children can produce Color Charts that will not only teach them a simple and scientific theory of color, but be of use to them throughout their entire school course.

1. After you have colored the Chart in this book mount it on a piece of cardboard a little larger than the size of the Chart page. A little paste applied to each of the four corners is all that is necessary. Make a cover for the Chart by cutting construction paper, of a grayed tone, one inch longer than the longest measurement of the cardboard. Paste this extra inch to the back of the top of the cardboard. Fold over to make a hinge. This can be done in primary grades.

2. Follow the steps given above, adding an easel support to the Chart, by pasting a strip of cardboard about 2" x 6" to the back, as a brace. Score the strip about an inch from the top, to make the hinge. Paste the inch space to the back of the Chart. This device will hold the Chart in an upright position, when it is so desired.

3. Make a passe-partout case for the Chart. Cut a piece of cardboard $\frac{1}{2}$ " larger on all sides than the Chart. From a sheet of transparent celluloid, cut a piece the size of the cardboard. Fit the cardboard and the celluloid together and paste passe-partout binding on three edges,—two long and one short edge. This makes an open case, into which the Chart may be slipped. An easel back may be added, if desired. When protected in this way by the transparent cover, the Chart may be used in class-room work without being removed from the case.

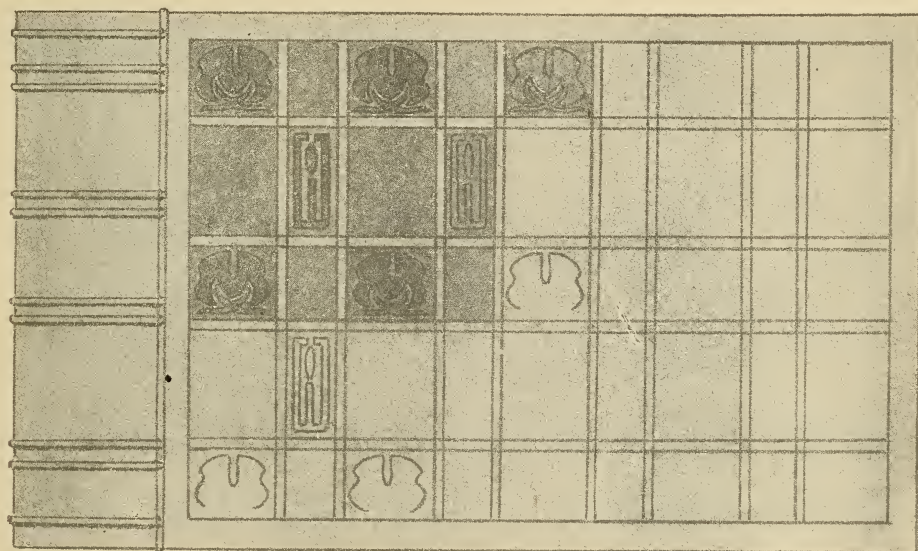
Pages 1 and 2 of this book consist of a detached Outline Color Chart which should accompany each book.

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A Pencil Drawing of a Flower: This flower, which is a member of the large hibiscus family, was chosen for a sketch because of the color contrasts presented by different parts of its growth, and also because of the many suggestions for design found in the seedpod, the flower, the leaf and the bud.

The large flower is pale yellow in color, with distinctive markings of violet at the base of each petal. In treating it with pencil, the flower was carefully drawn, and left without pencil values, except where the violet markings occurred. The leaves were also carefully drawn as to growth and shape, and their fine, dark-green color was expressed by pencil strokes. Different parts of the flower were sketched separately. You will see on the next page some of the uses to which these shapes have been put.



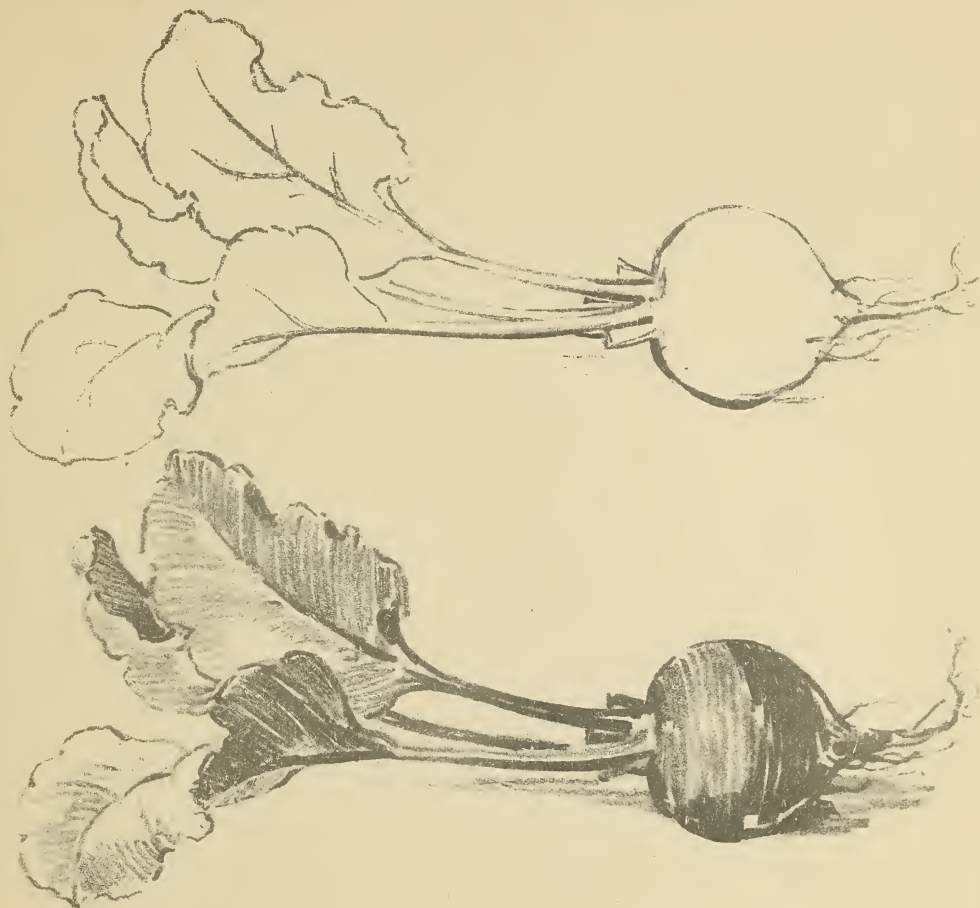
5

A Design For a Book Cover: A hand-made book may be attractively decorated by ruling a geometric pattern of straight lines, as a basis for stencilled units. Choose a suitable cover paper of grayed tone. Lay off the required size for the cover. Set off a certain width for the binding, as shown in Fig. 5. Rule marginal lines equally distant from the top, bottom, left and right limits of the cover, not considering the part designed for the binding of the book. On the upper and lower marginal lines, set off half-inch spaces. On the right and left lines set off inch spaces. Rule light lines connecting opposite points. This divides your field into oblongs. Now rule parallel lines at equal distances from the lines already drawn, dividing the field into large, middle-sized and small spaces (See Fig. 5). Plan to use two different units in your field. The units used in the design shown on this page were cut from paper, their motives being found in the plant drawing on page 3. Trace the units selected in the spaces for which they were designed. Choose a monochromatic color scheme from the Chart on page 2, and fill in the units and some of the spaces between with tones of the same color as the paper chosen for the cover.

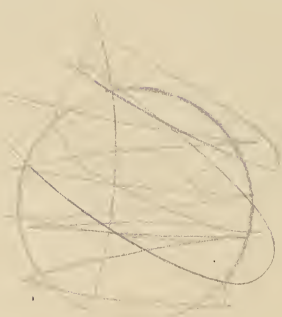


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<https://archive.org/details/graphicdrawingbo08unse>



Nature Studies in Pencil Rendering: Fruits or vegetables that show leaves in connection with solid form offer fine opportunities for effective pencil rendering. Choose specimens of interesting shapes. Prune away confusing leaves, twigs or other growths. Arrange the specimens in holders, if they are disposed to grow upright, or lay them in a horizontal position if they are heavy and solid. Place a background behind your specimen. Use a soft sketching pencil on white or cream paper. Indicate the leading lines of growth first, as in Fig. 1. Then add the tones of gray value. The full strength required should be secured with one stroke of the pencil. Do not depend upon increasing the strength or blackness of the tone by working over the same surface more than once. Add snappy, black accents where they seem to be suggested by the specimen you have before you.



10-

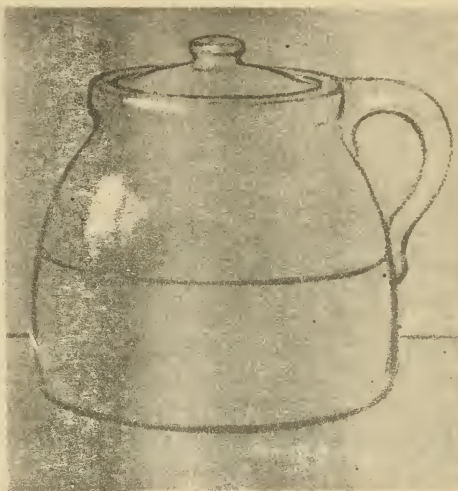


Sketching From the Landscape: The beauty of a pencil sketch depends upon the selection of a few elements, and upon the expression of those elements by means of simple, direct treatment. Choose subjects that present strong contrasts in values: a dark tree against a light sky; a house at an angle, with one side in shadow; or, a snow covered hillside with dark pine trees in the distance.

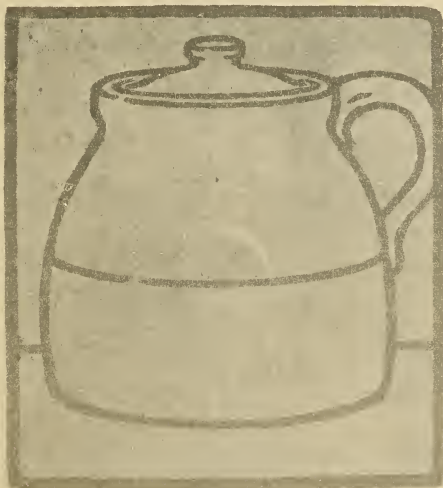
Study the rendering in the sketches shown on this page. Copy all three of these studies, to gain practice in this simple, strong mode of rendering. Then sketch from a selection you have chosen yourself.



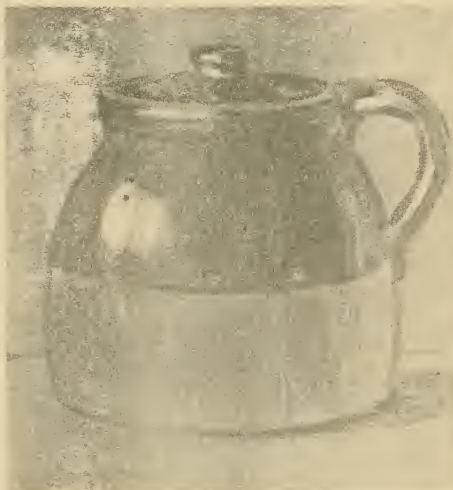
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3



4

Three Different Treatments of an Object: Objects of the kind represented on this page are excellent studies for pencil rendering, for outline drawing with colored crayon, or for decorative treatment with brush and ink or black paint. The bean pot is simple in outline, and its masses of light and dark are of large size and definite shape. All these points are important, in selecting objects for similar study. Draw an accurate diagram of your object, like Fig. 1. When you are satisfied that it is correct in proportion, in perspective and in outline, rub soft lead pencil over the back and with the sharp point of a hard lead pencil make three different tracings on gray or colored paper. Finish one tracing with an accented line in sepia crayon, placing the high lights with white chalk (Fig. 2). Finish another tracing with a strong, even brush line of black (Fig. 3). Finish the third tracing with pencil or crayon rendering, adding the high lights with white chalk.



1



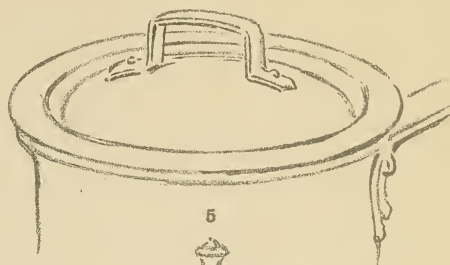
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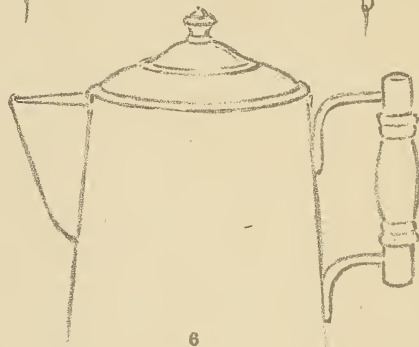
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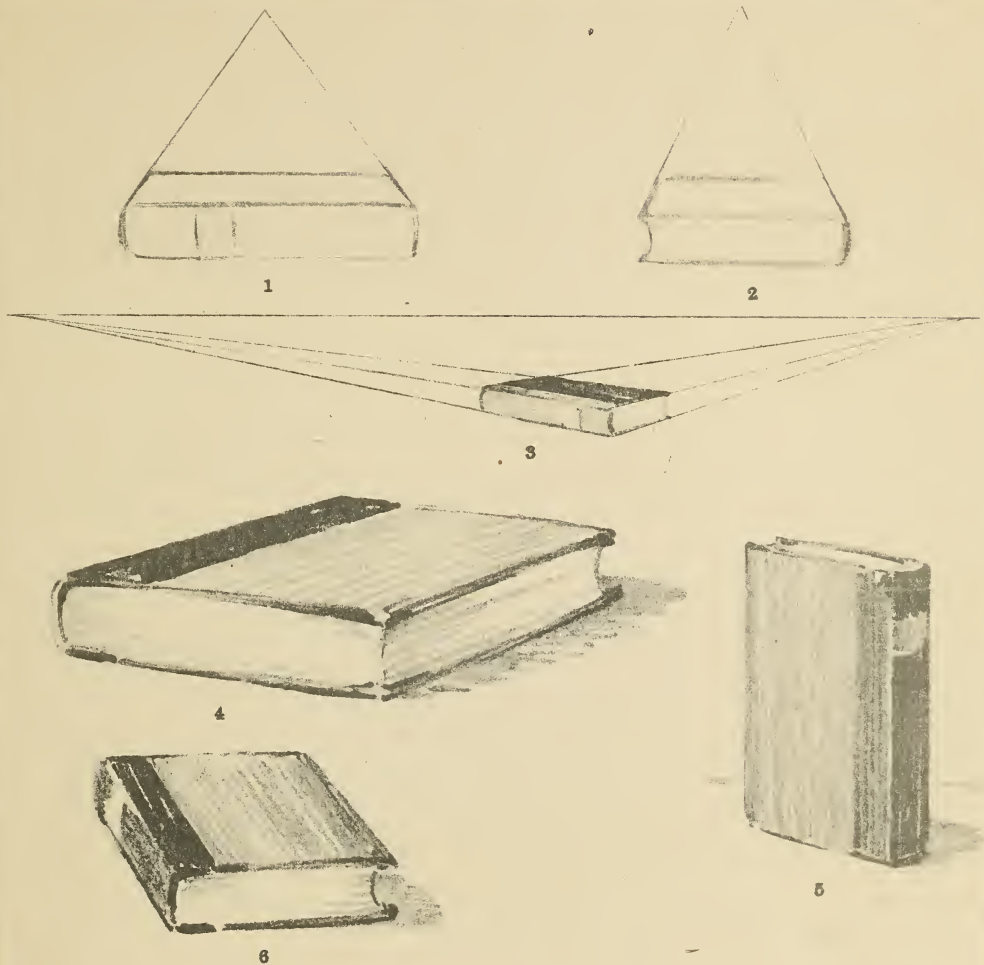
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7

The Perspective of Covers: Covers, handles and spouts are important details of still life drawing. They afford opportunity for accenting and as their construction is so varied, the representation of such features is always a fresh, new problem. In Fig. 1 the cover is rounding, with a knob or lifter in the center. Note that the drawing of the lifter is not in the center of the ellipse which outlines the cover. In Fig. 2 the cover is flat, and the lifter is here, also, drawn nearer to the farther curve of the ellipse than it is to the nearer curve. The center of the circle is not the center of the ellipse, in perspective.

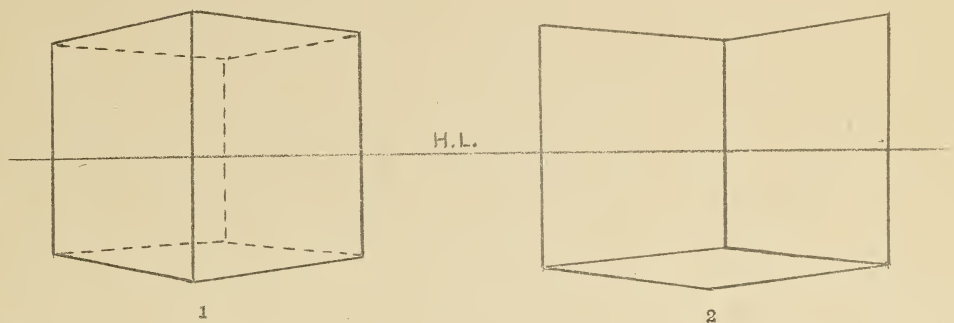
All of the seven kinds of covers shown here should be carefully studied, and compared with the actual covers of various household utensils. Make several drawings, working from the objects, of covers of various kinds. Use white paper and draw with a lead pencil, in accented outline.



Books in Rectangular Perspective: Books, from the nature of their proportions, are so deceptive in the appearance of their foreshortened faces, that it is best to sketch a horizon line and vanishing points, before attempting to draw them.

Fig. 1 shows a book lying on its side, with the back cover toward the observer. Notice how very much the cover is foreshortened, from front to back. Fig. 2 shows the same book with the end toward the observer. The longest dimension of the book is foreshortened to a surprising degree. It is hard to draw books correctly without taking the most careful pencil measurements of their foreshortened faces. You will need the horizon line and the vanishing points to help you, as well as pencil measurements. Remember that the eye must always be the final judge. That is, the drawing must look right.

Choose books that are somewhat worn. Edges and corners that are more or less broken offer better opportunities for accents. See that your drawings do not look as though they were made from wooden models.



3

A Drawing of the Corner of a Room: If you fold from a 9" square of heavy paper a cubical box, you will be able to understand clearly the small drawings on this page, and their relation to the drawing of the corner of a room. If you cut away two adjacent sides of the box, the lines that were invisible in Fig. 1 become visible. The section of the box thus made is shown in Fig. 2. You can now see the resemblance between this section and the inside of a room. When you draw floor and ceiling lines, you are really drawing lines that resemble in direction the dotted lines in Fig. 1.

Make a very simple line drawing of a corner of a room, either at home or in school.

A BEAUTIFUL DWELLING, AND A VIEW OF ONE OF ITS ROOMS

To the Teacher

On page 20 are shown the exterior of a simple but attractive house, and a view of a well-arranged room. Many uses may be made of such illustrations. While the representation of similar effects is beyond the power of average eighth grade students, discussion of household decoration should be encouraged. Any study or exercise that leads students of this grade to think about the appreciation of art principles to home furnishing can not fail to be of practical value.

The Exterior of a House

Look at the house shown in Fig. 1 on page 20. It is not large; it is not elaborately decorated; it is not made of costly materials; it does not look expensive; yet there is something about the house that makes it "a little different." It is a house that one would remember, as separate and distinct from other houses. Its chief characteristics seem to be its simplicity, and the beauty of its proportions. Perhaps this is why it looks "different." It is built primarily for a home. It has ample ground space around it. It evidently contains the number of rooms that a family in ordinary circumstances would need. These rooms seem to be well lighted and well ventilated. The proportion of the height of the house to its width and depth have been well thought out. The windows are well spaced, and well placed, in attractive groups, rather than scattered. The long, unbroken roof lines all give a sense of restfulness and harmony with the surrounding landscape. The color scheme is cheerful and inviting, and yet is not too pronounced. All of these points are more important than elaborate decoration, or features used only for show. Can you not imagine a quiet, well-ordered and happy family life in a house like this?

A Room in the House

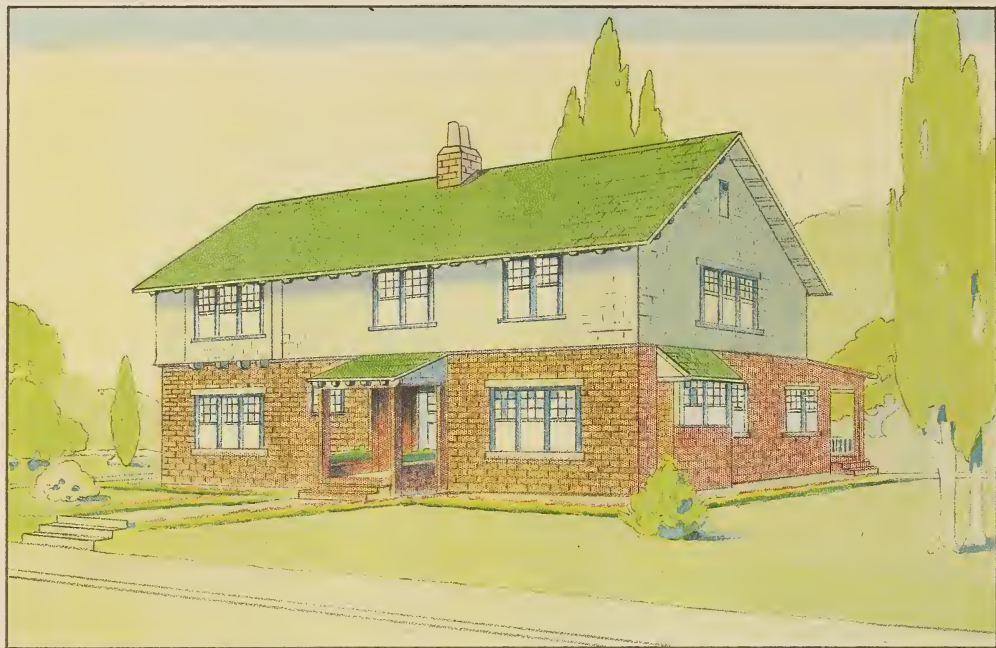
A corner of the living room in the house is shown in Fig. 2. Here again is the same simplicity of treatment. The door, window and fireplace are planned to break the wall spaces into pleasing relationships, and also to accommodate the necessary articles of furniture. The woodwork is severely plain, depending for interest on the beauty of the grain, brought out by proper finishing. You see on the walls no realistic roses, or climbing vines, or flying birds, which would disguise as much as possible the function of a wall, and make a poor background for pictures. A soft gray-green tone is chosen for the paper, and the placing of a narrow shelf or rail at the proper distance below the ceiling takes the place of the ordinary border or frieze, and prevents monotony. A few pieces of pottery help to brighten the effect, supplying color spots of interest.

The Furnishings of the Room

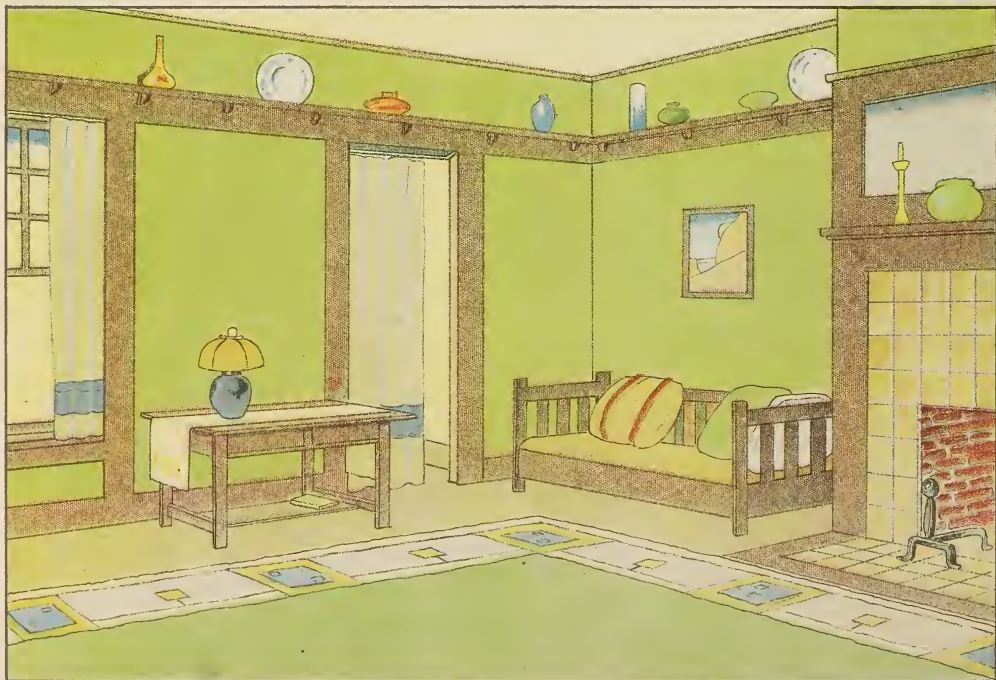
The furniture in our ideal room is free from carving, or ornament, for this is a home where richness of effect is not sought. Genuine wood-carving may be beautiful, if it is done on wood with little grain, and if it is made in accordance with the laws that govern ornament of any kind. But the so-called carving that is done by machinery and glued to an article of furniture has no place in our ideal home.

Observe the design and coloring of the rug. You do not see realistic flowers, animals or landscapes here. It is a flat mass of quiet coloring, with an interesting border. The curtains are not of lace, with trailing vines scattered over the surface. They are hangings of semi-transparent muslin or net, with a band of color at the bottom. They soften the hard outlines of the window-frame, and yet do not keep out light and air.

There are many other points that might be brought out, in the discussion of this simple and beautiful room.



1



2

A SIMPLE BUT BEAUTIFUL HOME



BY SPECIAL PERMISSION METROPOLITAN MUSEUM, NEW YORK

REPRODUCED DIRECT FROM ORIGINAL BY COLOR PHOTOGRAPHY

PORTRAIT OF A MAN

REMBRANDT

PICTURE STUDY: PORTRAIT OF A MAN

Rembrandt van Rijn

Great Portraits

If portraits were to be judged only on the basis of their likeness to the physical appearance of the people who sit for them, then photographs would be the highest form of graphic art. The camera can certainly give us a faithful record of whatever is placed before it. But a great portrait is something more than a photograph. It is even more than a delineation of character. It must meet both of these requirements, and in addition, be great as a painting,—great in its composition, and in its technique.

Rembrandt's Portrait of a Man

The original of the fine picture on page 21 was painted in the year 1640. Do you think if this painting had been only the life-like representation of a Dutch gentleman of the middle ages, that it would have been so carefully treasured, through all these years? We do not know the name of the man who sat for this portrait. In the life and history of the world he doubtless played his part; but he was unknown to fame, and it is not because of him that this picture is great. His portrait is great because Rembrandt made of it a work of art,—a masterpiece. He did this by his superb mastery of technique, his marvellous arrangement of light and dark masses, and his subtle blending of colors. The subject shows a man about forty years old. He wears a high-crowned, broad-brimmed, black hat. His coat or mantle is also of black, and is separated from the other dark masses in the picture by a wide, white collar. The warm, rich flesh-tones of his face are framed in long, dark brown hair,—the fashion of the country and the time. The grave eyes look out with a kindly expression, as of one who does not repel, but invites further acquaintance. His left hand is partly hidden by the cloak and a lace ruff at the wrist is seen in the shadow at the bottom of the canvas.

The Composition of the Picture

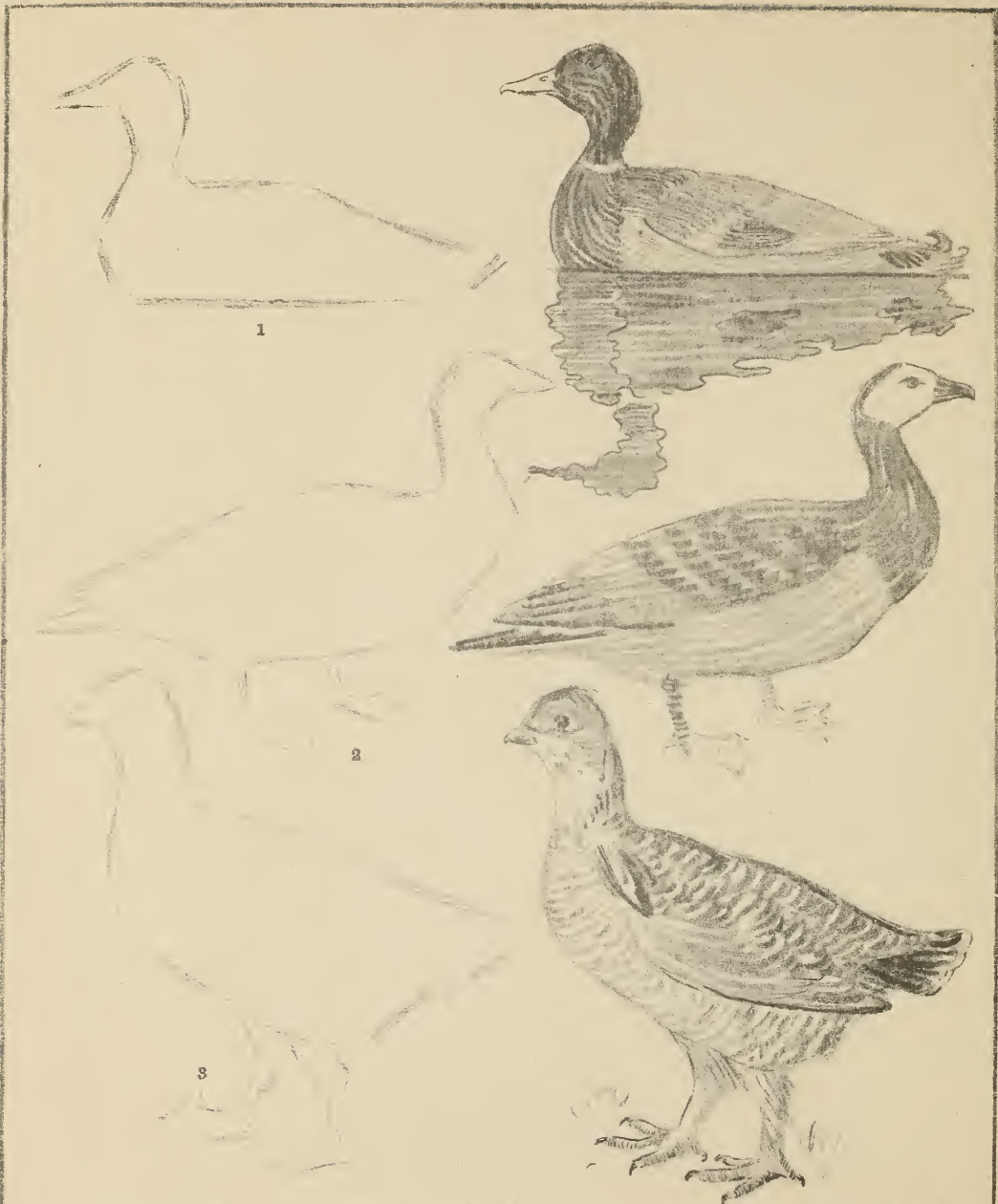
Rembrandt's pictures lack the superficial qualities of prettiness, which to some people are the first requisites of a picture. Mere prettiness appeals to the eye; it seldom appeals to the intellect. Rembrandt worked with large shapes, with rich textures, with low-toned but glowing colors. These are not the mediums with which prettiness is depicted. In this particular portrait, notice that but three general tones are used. The figure of the man is an arrangement of dark and light, balanced against a background of middle value. The chief interest of the picture lies in the face. Hence the strong light is placed here. An echoing note is seen in the treatment of the lace and the hand, as it passes under the sleeve. Study the exquisite line of the hat—now sharply accented, now softened, and finally lost in the treatment of the hair. Trace with your finger the beautiful line that starts at the right of the picture near the bottom, and follow it up the arm across the shoulder, up the hair, over the rim of the hat and down again, as it is lost in the meeting of the left shoulder with the background. Rembrandt was a master of line, of mass, and of color.

Biographical Notes

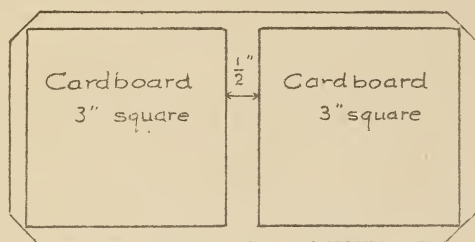
Rembrandt van Rijn was born in 1607 and died in 1669. He was the son of a Leyden miller, who hoped to make of him a learned man, and with that end in view sent him to the high school of the town. But Rembrandt had determined, early in life, to become a painter. His first models were the Dutch citizens of his native town, including the members of his own family. He painted, at various times, not less than fifty portraits of himself, many of which became famous, and are now the priceless possessions of the best galleries of the world.



Picture Study: Woman Churning—Millet: Millet has been called the poet-painter. All that Carlyle has told us of the dignity of labor, all that Wordsworth has sung of the beauty of rustic homes and the poetry of common things, lives again on his canvasses. Millet was one of the painters that broke away from the accepted standards of his time. He was much ridiculed for his ideals, and lived in great poverty. But gradually the worth of his subjects and the beauty of his pictures brought about a change in the attitude of the public, and to-day his paintings stand pre-eminent among the works of artists.

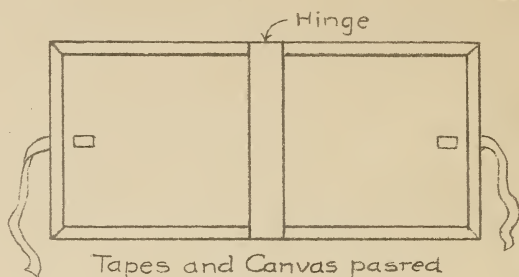


Pencil Studies of Wild Fowl: Stuffed specimens of wild fowl or other birds are good subjects for pencil sketching. Those possessing strong contrasts of light and dark in their plumage are best adapted to this work. The first stage in sketching from a wild duck is shown in Fig. 1. A few lines should be used to block in the general shape and proportion. After these important general effects have been expressed the drawing may be reviewed and improved before the pencil values are laid on. A good general rule to follow in all pencil sketching is to lay the strokes following the curvature of the direction of the surface to be expressed.



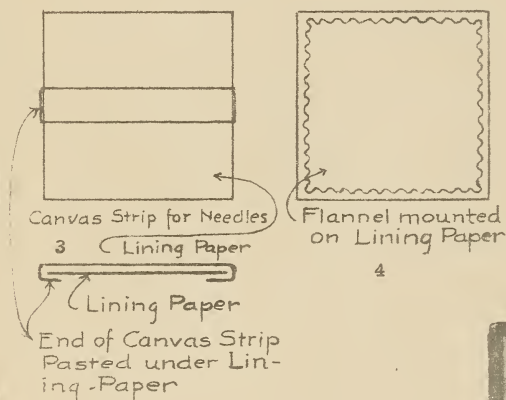
Lining Canvas 4" x 7 1/2"

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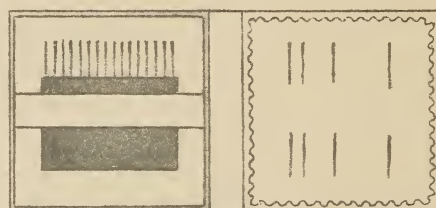


Tapes and Canvas pasted in Position

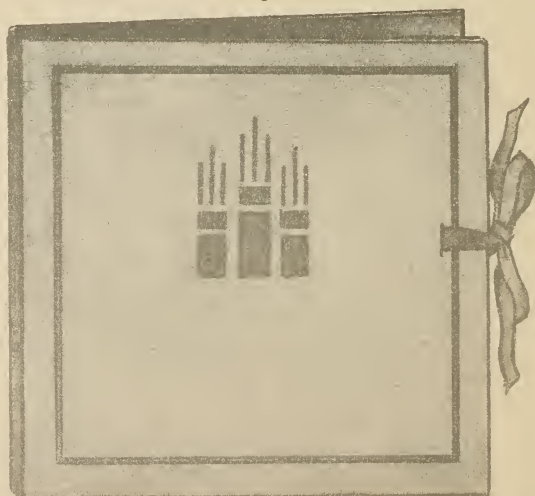
2

Canvas Strip for Needles
3 Lining PaperFlannel mounted
on Lining Paper

4

Inside of Needle Case with
Lining Papers in Position

5



6

A Needle Book: Cardboard and a strong cotton or linen material of grayed color are necessary for the construction of this needle case. The sketches show the dimensions and the processes of work. Lining papers, tie-tapes, small pieces of white flannel and finally the needles are necessary accessories. In Fig. 3 a strip of cloth is fastened by folding the ends over the edges of the lining paper, and pasting them to the cardboard between the lining paper and the cardboard. This strip is fastened only at the ends, in order that a paper of needles may be slipped between it and the lining paper. The completed case, opened, is shown in Fig. 5. When the construction of the case is neatly finished, an appropriate decoration may be painted or stencilled upon the cover. Use a color scheme developed from the Color Chart on page 2.

A B C D E F G H I J K L

M N O P Q R S T U V

W X Y Z · a b c d e f g h i

j k l m n o p q r s t u v w

x y z · 1 2 3 4 5 6 7 8 9 0

A · Happy · Easter · Tide

A · Merry · Christmas

HIGH · SCHOOL · BULLETIN

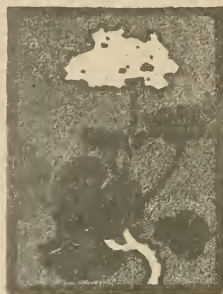
Alphabets and Letter Arrangements: The size of the alphabets and word groups given on this page will be determined by the size of the squares on the ruled paper used. If you desire letters for a poster or bulletin, the squares may be a quarter or a half inch on a side. But if cards, titles of books or programs are to be lettered, the small, commercially ruled squares should be used.

The letters in both alphabets given are beautifully proportioned. The "caps" are, in general, six squares high, and five squares wide, with O, Q, M, W, I and J as exceptions. The "lower case" alphabet shows still more variety in width. The aim was to space the letters of each alphabet so that a sense of balance and uniformity might be preserved. The right adjustment of letters, in word grouping, is something that must finally be determined by the eye.

Practice drawing these letters with a soft lead pencil, trying to obtain with one stroke the even width of line and the beautiful curvature of the rounding letters. When you can do this well with a pencil, try drawing letters in ink with a round or broad pointed pen.



SKETCHES & PRINTS

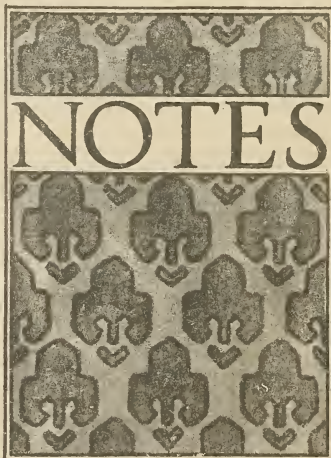


SKETCH BOOK

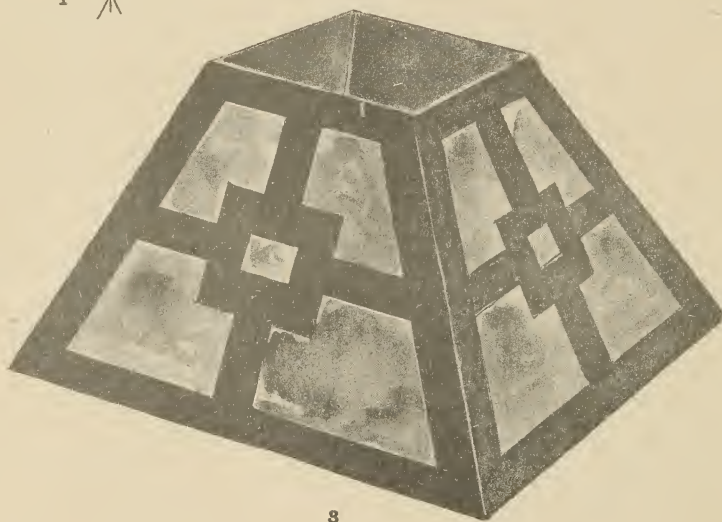
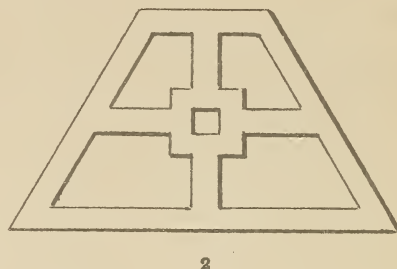
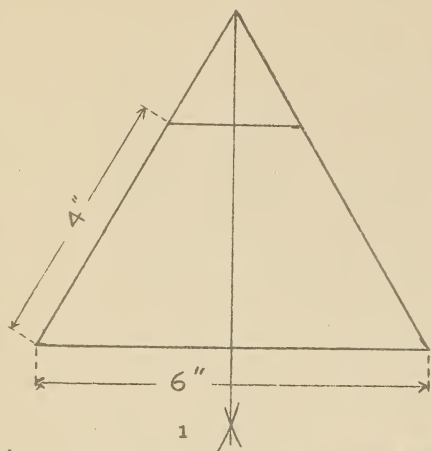
PORTFOLIO FOR DRAWINGS



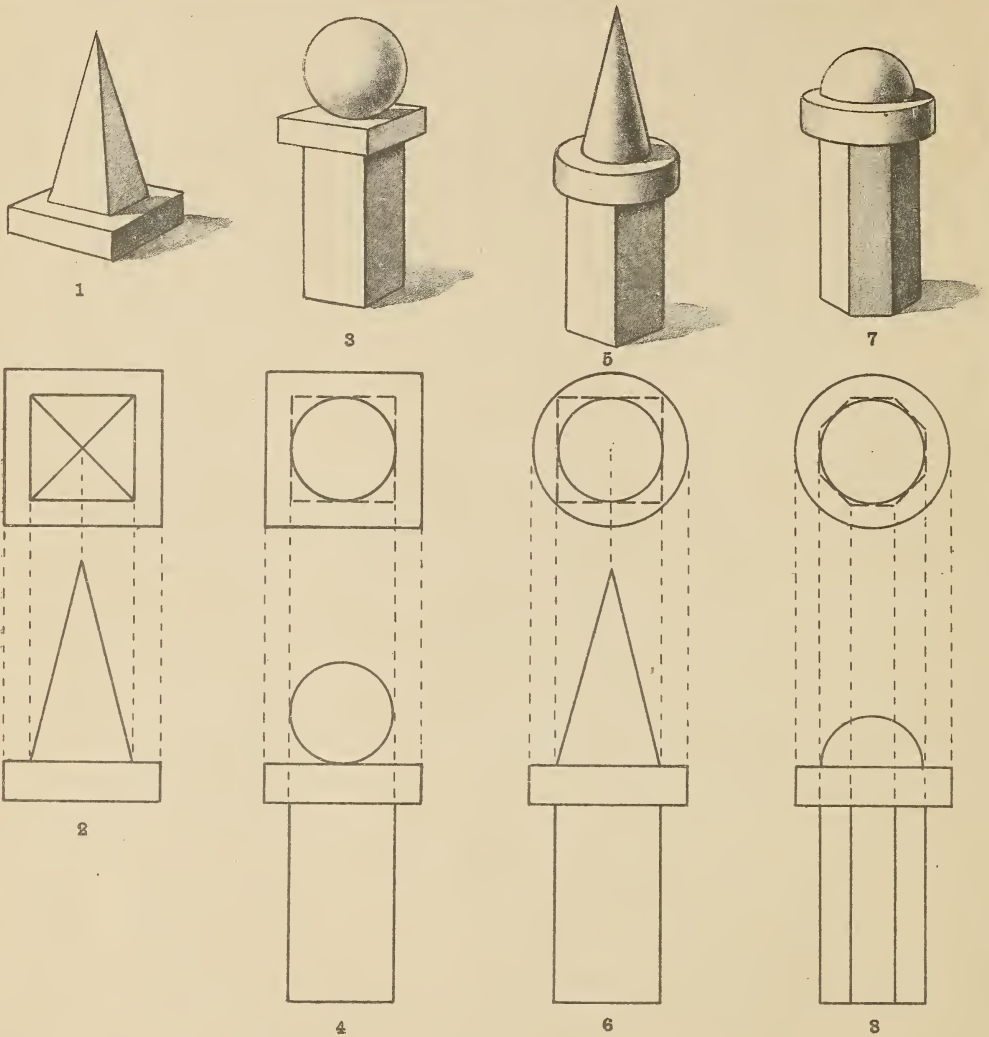
HERBERT SMITH



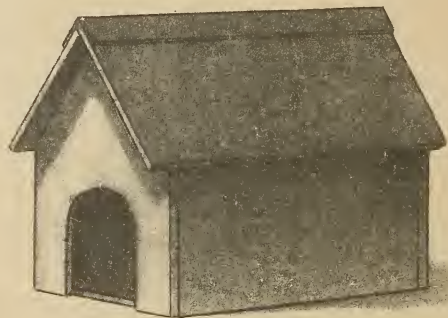
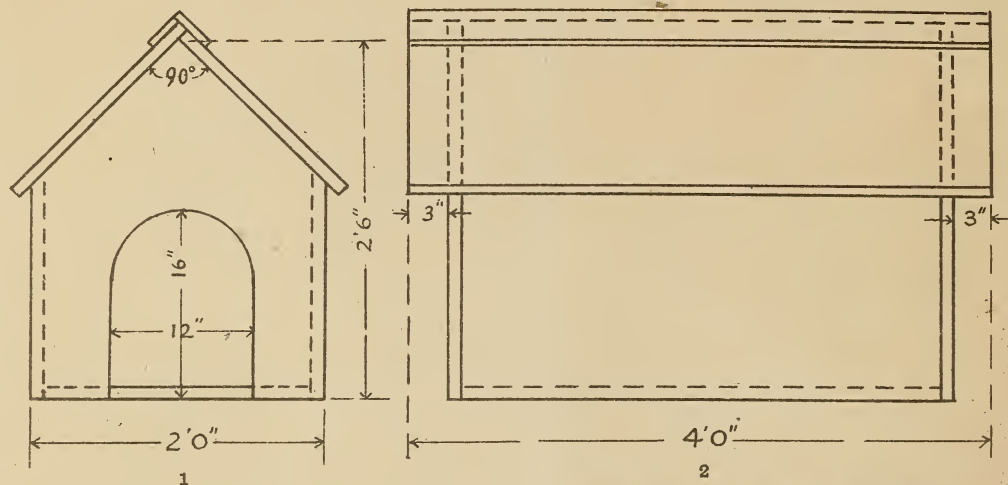
Decorative Designs for Portfolios: Good lettering in combination with the decorative treatment of nature, or with abstract units, makes suitable compositions to use on portfolios or books designed to be filled with miscellaneous material. Any one of the designs given above would be beautiful carried out in a color scheme selected from the Chart on page 2. The paper or cloth upon which the design is painted or stencilled should be a part of the scheme. All lettering should be most carefully spaced and drawn on squared paper, and transferred by tracing to the cover.



The Construction of a Candle Shade: In this exercise the necessary information as to dimensions, shapes and decoration are shown in Figs. 1 and 2. The basis for the shape is an equilateral triangle. Fig. 1 suggests how the compass may be used in constructing the triangle. It also shows that but four inches of the sides of the triangle are used, and the whole of the base. You will need four such shapes. Fig. 2 shows one of many decorative designs that may be planned for the openings. The pattern and design should be carefully drawn on manila paper, and the openings cut out with a sharp knife. Then make a tracing on black mounting paper of a weight almost as heavy as bristol board. Line the openings of each piece with colored tissue paper, or with Japanese rice paper that has been treated with water color to make a "stained glass" effect. Fasten the edges of the sides together by placing black passepartout tape on the inside of the lamp shade. Four strips of tape about an inch wide will be needed. Shade holders and candles may be purchased for a trifling cost.



Views of Geometric Solids: It is sometimes necessary in drawing different parts of machines or in architectural drawing to represent views of two or more objects used in combination. For instance, the square pyramid placed upon a square plinth often appears in turrets, steeples, gate posts, etc. The front and top views of such a combination appear in Fig. 2. Again, we can imagine that such a combination of forms as appears in Fig. 7 would often be seen in bolts or other parts of machinery. The working drawing of such a model must show not only visible edges in various views but also the edges that do not appear (Fig. 8). Invisible edges are expressed by dotted lines. From simple combinations of geometric solids make front and top views, using a ruler and compass.



A Working Drawing of a Dog-Kennel: A working drawing is a drawing that gives all the facts of form, size and structure, necessary for the construction of an object. It is the kind of drawing that a workman must have if he is to construct an object according to a definite plan or design. Working drawings may be made from objects already constructed, or may, in their own language, express the idea or design for an object not yet made.

A working drawing is made up of as many different views as are necessary to give all the facts needed in the construction of the object. In the working drawing of the dog kennel given on this page, but two views were needed,—the front or end view, and the side view. The front view shows two of the three dimensions; the height and the width from left to right; and the side view shows again the height and the width from back to front. All the dimensions are given in these two views, and all the facts of construction, even to the placing of the extra strips on the roof, the angle of inclination of the roof (determined here by the shape of the upper part of the front) and the shape of the opening or "door".

You can easily construct a dog kennel from these drawings, adapting the size to fit your own dog.

From some other object made of wood, such as a foot-bench, a knife-box or a book-rack, make a working drawing of two or three views, as is necessary to give all needed information.



1



2



3

COLORS IN GRAYED INTENSITIES

COLORS IN GRAYED INTENSITIES

Color Schemes From the Color Chart

If you will turn to your finished Color Chart made from page 2 of this book and compare Fig. 1 on page 39 with the outer circle of colors, you will see that gray-orange is the dominant note in the landscape study. Analyzing the color scale printed below the study, we see that four tones of gray-orange have been used. In the scale, it is intended to show the gray-orange of the outer circle in the chart, in the second rectangle from the left; a shade of gray-orange appears in the left rectangle of the scale, and two tints of gray-orange form the two remaining rectangles. Find all of these tones of gray-orange in the study.

A Gray-Orange Color Scheme

A monochromatic color scheme may present different tints of a color, different values of a color (that is, light or dark tones of a color) or different intensities of a color (that is, different degrees of grayness). In your Color Circle made from page 2, two different degrees of grayness of orange will be seen, but no tints or shades of gray-orange. In the group of monochromatic color schemes shown below the circle, two tints and two shades of gray-orange are given. This definite study of color becomes as interesting as the study of music, where every tone has a name and a place in the musical scale.

A Gray-Violet Color Scheme

Fig. 2 on page 39 shows a monochromatic scheme in tones of gray-violet. Look in your Color Circle made from page 2 and find the dominant note. The strongest note in Fig. 2 is the tree trunk. This seems to be very close to the gray-violet of the outer color circle, although we must make allowance for the inaccuracy of printed colors. Three other tones of gray-violet appear in the scale below the study. Locate these tones in the composition.

A Complementary Color Scheme of Gray Yellow-Orange and Gray Blue-Violet

In the bowl of primrose blossoms shown in Fig. 3, page 39, a beautiful arrangement of complementary colors is used. Look in your finished Color Circle for these tones. They are yellow-orange and gray-blue, in several tints and shades. Complementary schemes offer a greater range of colors, and are more complete in their harmony than monochromatic or analogous schemes, just as in music chords from the lower register of the piano, in connection with higher tones, make a richer harmony. You see how little the "real" colors of the landscape or of flowers have to do with the beauty of these schemes. Any one of the three compositions on this page might have been worked out in a different harmony, with just as great satisfaction. Colors are like musical tones. They can be combined in endless variety, limited only by the ability of the person who engages in the delight of "playing" with them.

Note.—In making this close analysis of colors in printed reproductions and in comparing them with the pupils hand-made Color Charts, some allowance must be made for the imperfections of printers' inks. The value or truth of the Color Theory presented in these books is in no way affected, if inaccuracies are found in the printed reproductions of studies.

SUGGESTIONS TO TEACHERS

(Continued from Page 2, of cover.)

Figure and Animal

Pages 21, 24 and 26. The human figure is portrayed in two very different modes of treatment, on pages 21 and 24. Call the pupils' attention to the contrast between the exquisite line quality and fine drawing of Rembrandt's picture and the heavy and massive treatment used in portraying the peasant woman in Millet's masterpiece. Both treatments are true to the life of the subject and both pictures are beautiful. Artists study the human figure more than they study any other element in nature or in art.

Sketches of wild fowl should be made from stuffed specimens (page 26). The treatment of the feathers is an interesting study for pencil technique.

Construction

Pages 28, 34, 36 and 38. The cardboard and paper construction involved in the making of the needle book (page 28) should interest boys and girls alike. If the work is neatly done, and the right quality of materials is used, the result will be dignified and worthy. Such exercises immediately suggest a gift, and should be given in December. The candle-shade (page 24) is a good exercise in design, as well as in construction. Each pupil should make an original arrangement of spaces for the openings. Here again neatness and good workmanship will ensure a pleasing result. Geometric views of simple combinations of geometric solids should be drawn by both girls and boys. The teacher should arrange combination not given in the book (page 36). Be sure that the conventions of working drawings are correctly used. A working drawing of a common object, involving two views, should be made by all the pupils. The boys should be encouraged to make the object, using their own drawings as "plans and specifications." This may be done at home, if school conditions do not admit the carrying out of this valuable exercise in regular hours. Page 38 suggests the kind of project that may be carried out by boys of this grade.

Lettering

Pages 30 and 32. A more beautiful alphabet than has been given before in these books appears on page 30. Smaller spaces on the checked paper used make possible more subtle proportions in the letters. Pupils should be provided with commercially ruled squared paper, and should copy the letters in both alphabets given. Page 32 gives four beautiful designs for book covers of various kinds. These designs will be twice as valuable if they are carried out in actual covers, made to fill a personal need that the pupil may feel.

Picture Study

Pages 21 and 24. Two examples of masterpieces are presented on these pages. The text on page 22 interprets Rembrandt's fine painting. The pupils should be encouraged to look up other examples of this artist's work. An interesting collection of good pictures, with descriptions written by the pupils, would make worthy material for the inside of a portfolio, designed according to the suggestions on page 32. Local libraries will furnish much interesting material concerning Millet (page 24).

Theory of Color

Pages 1, 2 and 39. The Chart of grayed colors is probably the most beautiful chart of the series. It may be too difficult for some pupils of eighth grade to execute, but the teacher should always make a copy to be studied and used by the pupils as a color standard. The text on page 40 explains the color plate on page 39.

